

No. 681,256.

Patented Aug. 27, 1901.

S. OLDHAM.
STONE DRESSING MACHINE.

(Application filed Mar. 12, 1901.)

(No Model.)

2 Sheets—Sheet 1.

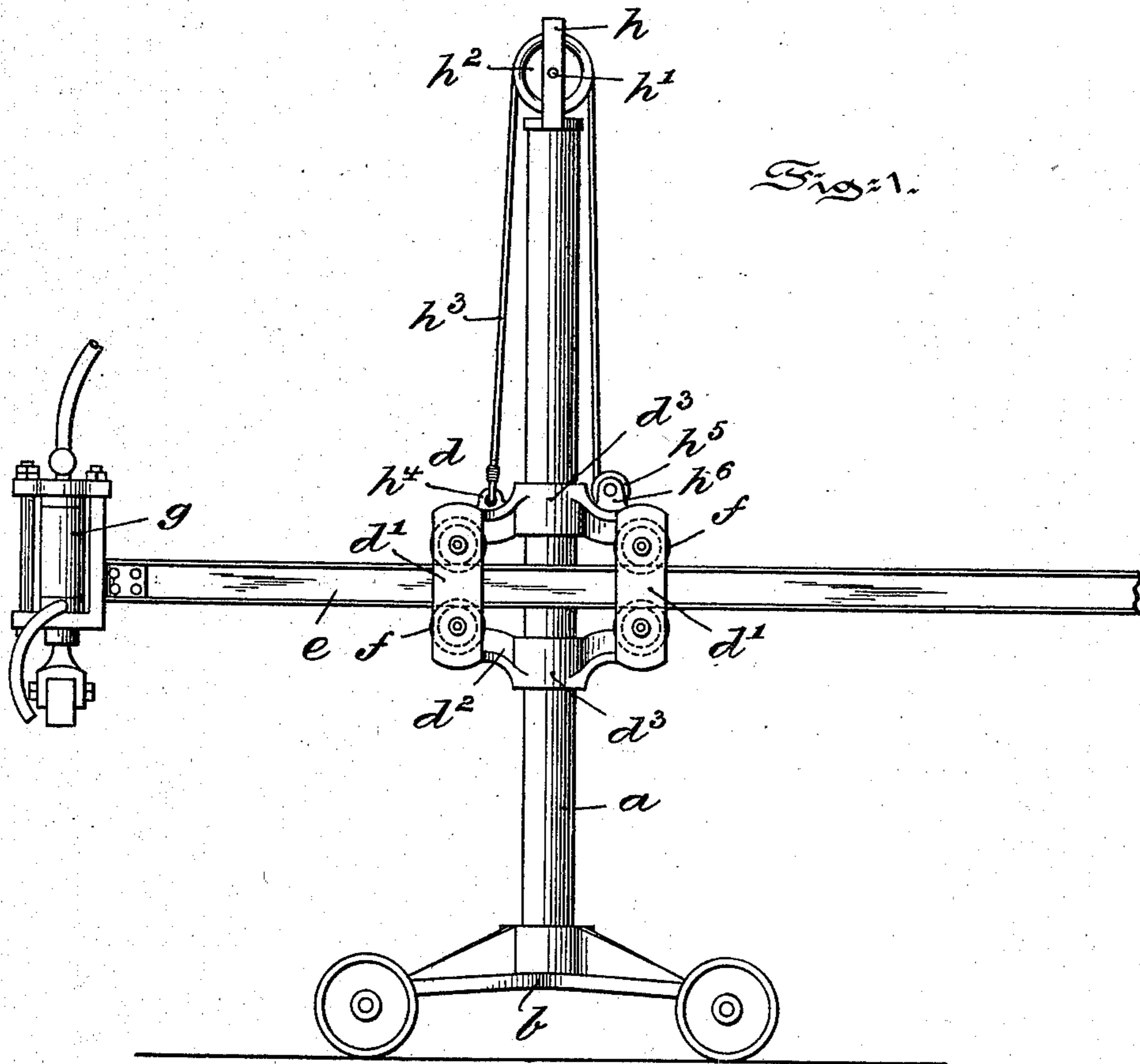
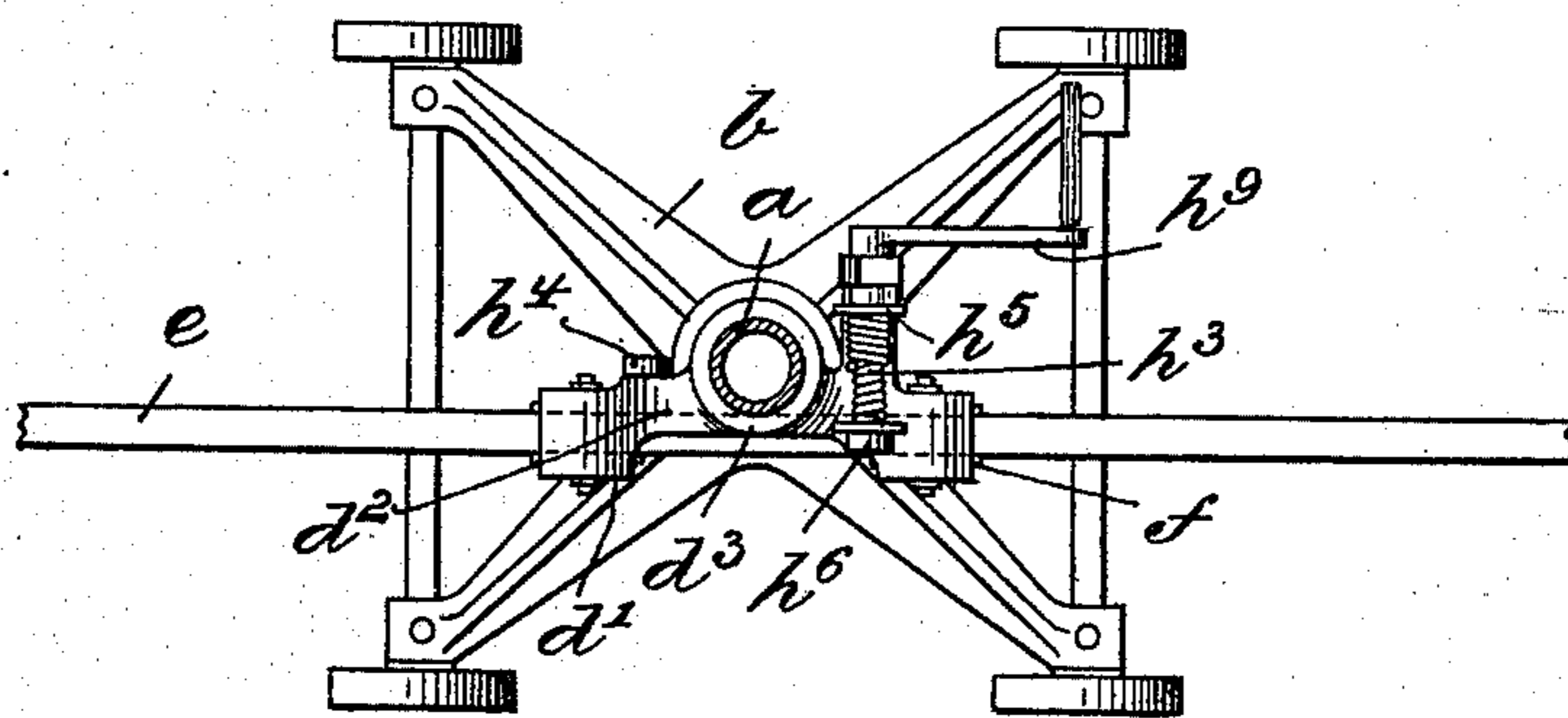


Fig. 2.



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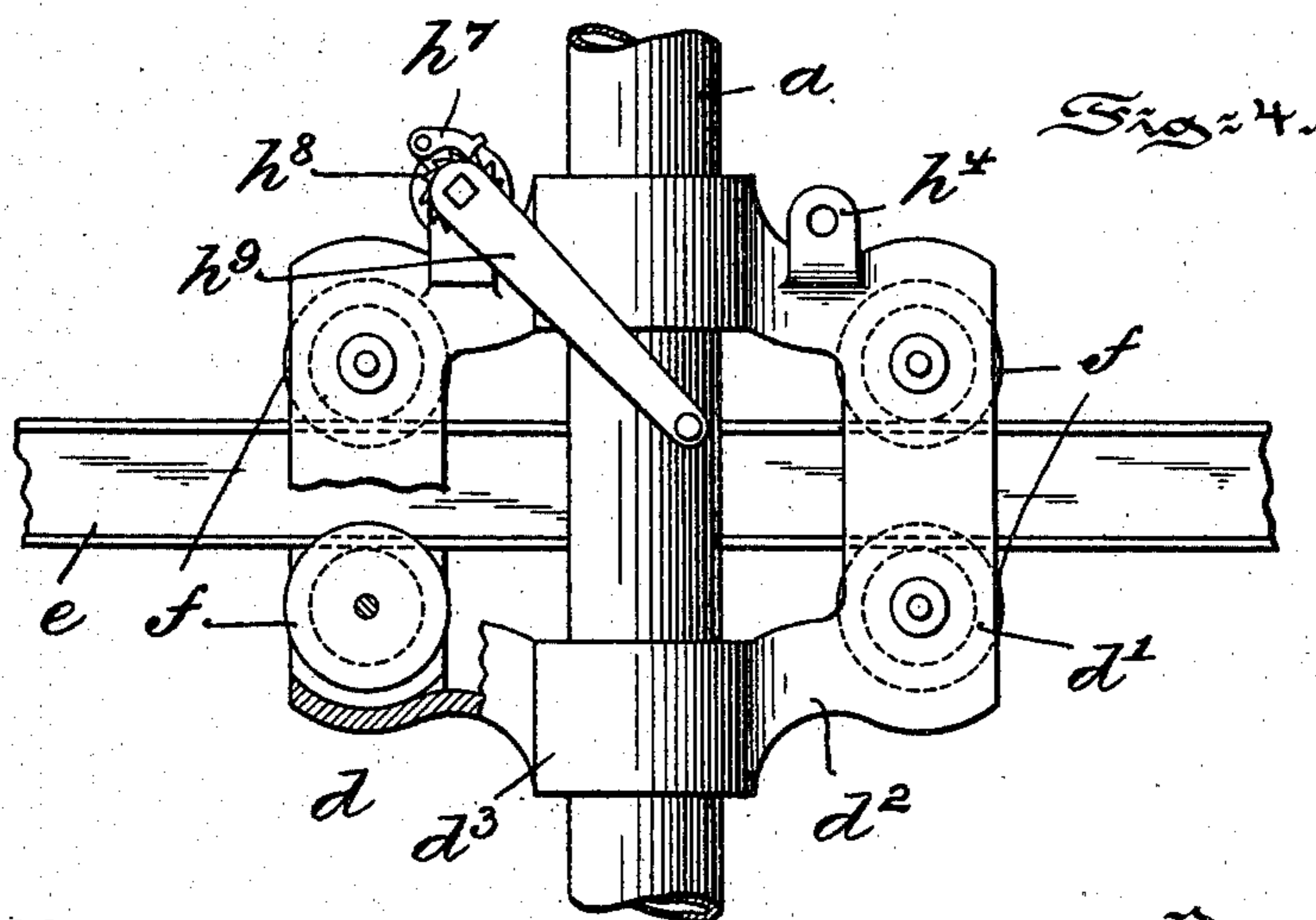
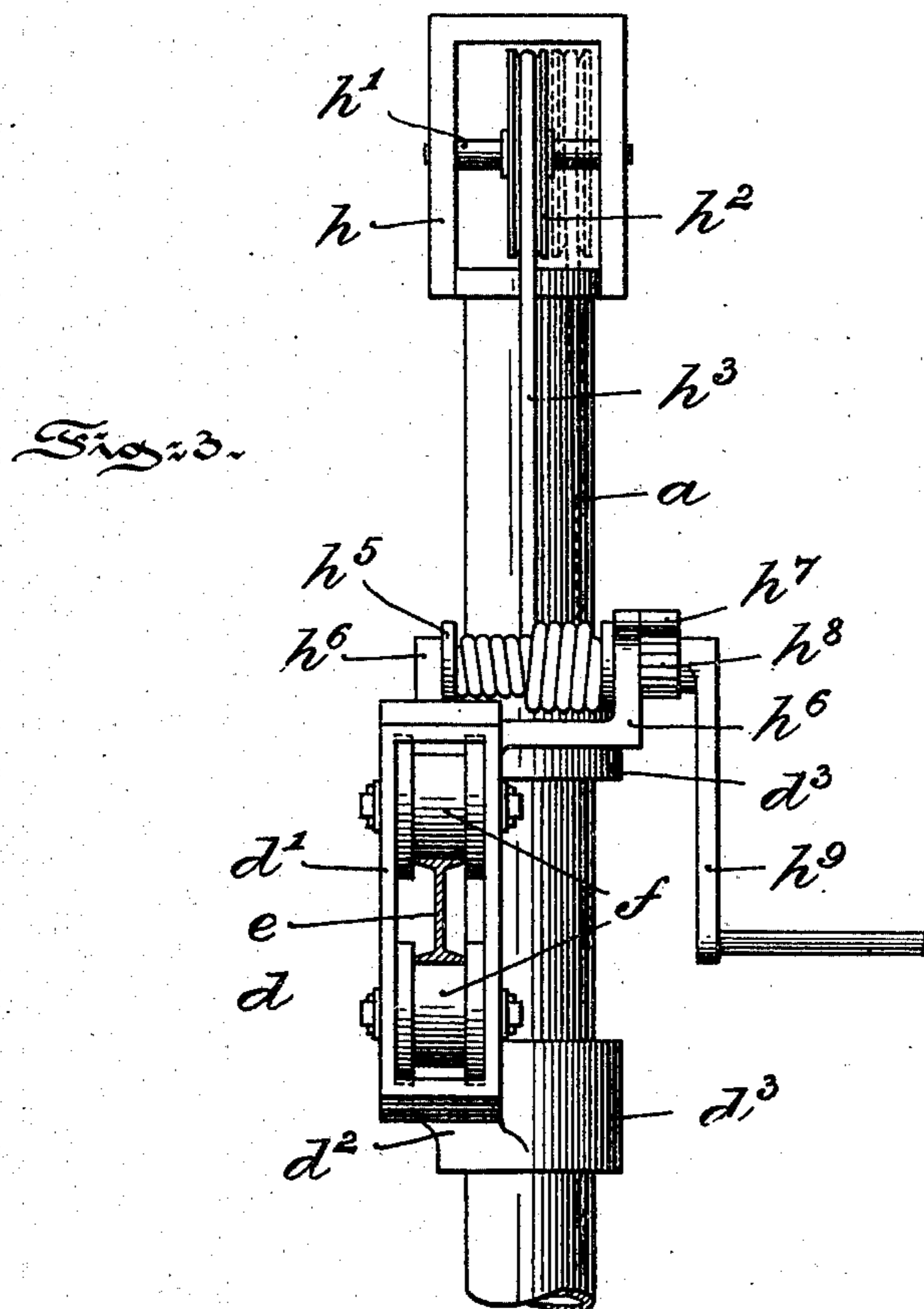
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2 Sheets—Sheet 2.



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UNITED STATES PATENT OFFICE.

SAMUEL OLDHAM, OF PHILADELPHIA, PENNSYLVANIA.

STONE-DRESSING MACHINE.

SPECIFICATION forming part of Letters Patent No. 681,256, dated August 27, 1901.

Application filed March 12, 1901. Serial No. 50,787. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL OLDHAM, a citizen of the United States, residing at Frankford, Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Stone-Dressing Machines, of which the following is a specification.

My invention has relation to a machine for dressing, surfacing, or scaling stone and other substances or matter, and in such connection it relates to the construction and arrangement of such a machine. In machines of this type the tool must be so supported or carried as to respond readily to the hand of the operator, the parts must be simply constructed and arranged so that they will not become inoperative, and the tool-support must have the necessary freedom of movement and adjustment, both vertically and horizontally, to permit of use upon surfaces of varying heights, widths, and lengths.

To construct a machine possessing all of these desired advantages is the principal object of my present invention.

In the carrying out of my invention a standard or upright is used, which preferably is readily movable from place to place, and upon this standard is loosely supported a carriage, free to turn about the standard as an axis and free to move vertically up and down thereon. In this carriage and to one side of the standard is arranged the beam constituting the tool-support, and this beam is free to shift back and forth in a horizontal plane or direction in the carriage. The beam or support is of a length to be sufficiently resilient to overcome or compensate for the impact or shock of the tool upon the stone or material to be operated upon, and yet is so guided in the carriage that it will not twist laterally.

The nature and scope of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, in which—

Figure 1 is a front elevational view of a machine embodying main features of my invention. Fig. 2 is a top or plan view of a portion of the machine, the portion of the standard above the carriage being cut off. Fig. 3 is an enlarged side elevational view of the carriage

and the upper end of the standard, and Fig. 4 is an enlarged rear elevational view of the carriage and adjacent parts.

Referring to the drawings, *a* is the standard or column, of tubular or cylindric form, mounted upon a wheeled truck *b*, so that it may be readily moved from place to place. Sliding freely up and down upon the standard *a* and free to rotate about the same as a pivot is a carriage *d*, which, as illustrated, consists, essentially, of a framing *d'*, in which the I-beam *e* is adapted to be shifted, and two brackets *d*², each projecting from a sleeve *d*³, surrounding the standard *a* and free to slide and turn thereon. The framing *d'* is provided with two sets of channeled rollers *f*, which serve as guides as well as supports for the I-beam *e*. The rollers *f* of each set are separated a distance from each other sufficient to permit of the comparatively free movement of the beam *e* between the rollers, and the channeled peripheries of the rollers *f* serve to receive and guide the flanged head and base of the beam *e*, as clearly illustrated in Fig. 3. The I-beam *e* constitutes the support for the pneumatic or similar impact-tool *g*, which is secured by any suitable means to one end of the beam *e*. The beam *e* is of sufficient length to be sufficiently resilient in a vertical plane to respond or compensate for the impact or shock of the tool *g* when said tool is operative, and yet its support and guidance in the carriage *d* are such as to prevent torsion or twisting of the beam *e*. As before explained, the carriage *d* is free to slide up and down upon the standard and also free to turn thereon. It has no direct connection therewith or support thereon.

To properly maintain the carriage *d* in its proper position with respect to the standard, as well as to permit of its being moved up and down, so that the beam *e* and tool *g* will be raised up or down to required operative position with respect to the work to be operated upon, the following preferred arrangement of mechanism is employed: Upon the top of the standard *a* is secured a box-like bracket *h*, in which a shaft *h'* is supported. Free to turn on this shaft *h'*, as well as to slide back and forth thereon, is a sheave *h*². A wire rope *h*³ is secured at one end to an eye *h*⁴ on the carriage *d* and is then passed

over the sheave h^2 and secured to a drum or winch h^5 , adapted to be turned in the brackets h^6 , projecting from the carriage d . A pawl h^7 and ratchet h^8 on the winch or drum h^5 prevent the latter from unwinding, and a handle h^9 is provided, by means of which the drum may be revolved. When the handle h^9 is operated, the rope h^3 is wound upon the drum or winch h^5 and the carriage d is elevated on the standard a . As the rope is wound upon the drum h^5 the sheave h^2 slides back and forth upon its supporting-shaft h' , so as to permit the rope to be regularly coiled upon the drum h^5 and not bunched or irregularly laid upon the drum. (See Fig. 3.) When the carriage d is to be lowered, the pawl h^7 is released from the ratchet h^8 and the drum h^5 permitted to turn to unwind the cable or rope h^3 , the movement of the drum h^5 , however, being controlled through the handle h^9 , held by the operator.

Having thus described the nature and object of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a machine of the character described, a cylindrical standard, a carriage arranged tangentially to the periphery of the standard, a sleeve surrounding but wholly disconnected from the standard and free to slide up and down and to turn thereon, said sleeve carrying said carriage, means for supporting the carriage and sleeve from the top of said standard, a beam having two points of support in the carriage and adapted to slide therein in a plane to one side of the central axis of the standard, and an impact-tool carried at one end of said beam, substantially as and for the purposes described.

2. In a machine of the character described,

a cylindrical standard, a sleeve surrounding but wholly disconnected from the standard and free to slide up or down and to turn thereon, a carriage arranged tangentially to the standard and projecting from said sleeve, means for supporting the sleeve and carriage from the top of the standard, said means constituting the mechanism for elevating or depressing the carriage in a vertical plane, a single beam having two points of support in the carriage and adapted to slide therein in a plane to one side of the central axis of the standard and an impact-tool carried at one end of said beam, substantially as and for the purposes described.

3. In a machine of the character described, a cylindrical standard, an I-beam constituting the support for an impact-tool, a sleeve surrounding but wholly disconnected from the standard and free to slide up or down and to turn upon said standard, a carriage arranged tangentially to the standard and projecting from said sleeve, said carriage provided with two sets of channeled rollers, each set arranged to one side of the central axis of the standard and both sets arranged in a plane to one side of the said axis, each set of rollers constituting a support for the I-beam adapted to be guided by the sets of rollers and to slide in said carriage, substantially as and for the purposes described.

In testimony whereof I have hereunto set my signature in the presence of two subscribing witnesses.

SAMUEL OLDHAM.

Witnesses:

J. WALTER DOUGLASS,
THOMAS M. SMITH.